terminal displaying the third screen.

[0021]

Preferably, the second screen includes an activity state display area indicating, in time series, information on whether the user of the second communication terminal is active and information on whether the user of the second communication terminal is moving.

When the second communication terminal is being operated or when acceleration of the second communication terminal is equal to or greater than an acceleration threshold value, it is determined that the user of the second communication terminal is active.

When a moving speed of the second communication terminal is equal to or higher than a speed threshold value, it is determined that the user of the second communication terminal is moving.

[0022]

Preferably, the second screen includes at least one of a body temperature display area indicating, in time series, a body temperature of the user of the second communication terminal and information on a normal range of the body temperature, a pulse display area indicating, in time series, a pulse of the user of the second communication terminal and information on a normal range of the pulse, or a blood pressure display area

Fig. 8 is a display example of the first screen of the first communication terminal, in which a lower area of the user position information display area is displayed.

Fig. 9 is a display example of a second screen of the first communication terminal.

Fig. 10 is a display example of a third screen of the first communication terminal.

Fig. 11 is a display example of a fourth screen of the first communication terminal in a case where there is a response from a second communication terminal.

Fig. 12 is a flowchart of screen switching operation control according to a second embodiment.

Fig. 13 is a display example of a fourth screen of a first communication terminal in a case where there is no response from a second communication terminal according to the second embodiment.

Fig. 14 is an example of a predetermined message transmitted from the first communication terminal according to the second embodiment to a neighbor’s terminal of the user of the second communication terminal.

Fig. 15 is a display example of a fifth screen of a second communication terminal according to a third embodiment.

Fig. 16 is a flowchart of notification control according to the third embodiment.

The first embodiment shows an example in which a user (a user name: papa, Taro) with a user ID: 11 logs into the biometric information program (information transmission program) installed in the 51st communication terminal M51 with the user ID: 11, a user (a user name: Hanako) with a user ID: 12 logs into the biometric information program installed in the 52nd communication terminal M52 with the user ID: 12, a user (a user name: Susumu) with a user ID: 13 logs into the biometric information program installed in the 53rd communication terminal M53 with the user ID: 13, and a user (a user name: grandpa) with a user ID: 23 logs into the biometric information program installed in the 54th communication terminal M54 with the user ID: 23, and a user (a user name: grandma) with a user ID: 24 logs into the biometric information program installed in the 55th communication terminal M55 with the user ID: 24.

Further, screen display examples illustrated in Figs. 7 to 11 are displayed after the user (the user name: papa, Taro) with the user ID: 11 logs into the biometric information program installed in the 51st communication terminal M51 with the user ID: 11.

[0040]

Additionally, a description will be given on the assumption that a “first communication terminal” or a “communication terminal” described in the claims

corresponds to the 51st communication terminal M51, but the present invention is not limited to the 51st communication terminal M51.

In addition, a description will be given on the assumption that a “second communication terminal” described in the claims corresponds to the 54th communication terminal M54, but the present invention is not limited to the 54th communication terminal M54.

[0041]

Information transmission and reception between the information server 30 and the communication terminal is performed via the biometric information program.

In the first embodiment, a description will be given as to a mode using the biometric information program installed in each communication terminal. However, as shown in the third embodiment, each communication terminal may access an application service provider (ASP) server via a network and may use a biometric information program stored in said ASP server.

[0042]

(Information Source Transmission Unit 20)

The information source transmission unit 20 outputs disaster information (danger information) to the server communication unit 31 of the information server 30.

The disaster information includes at least information

communication terminal, and includes a user name belonging to the group, a user ID belonging to the group, a detail level (a first detail level parameter dp1) of the position information disclosed in normal times (while the safety type parameter sp is 0 and the biometric information parameter rp is 0), and a detail level (a second detail level parameter dp2) of the position information disclosed in disaster (while the safety type parameter sp is 1) or abnormal mode (while the biometric information parameter rp is 1).

[0068]

In the first embodiment, a mode in which the first detail level parameter dp1 and the second detail level parameter dp2 have three stages (1: discloses coarse position information (for example, a prefecture level); 2: discloses medium roughness position information (for example, a municipal level); and 3: discloses fine position information (for example, the address level)) will be described, but a mode in which the first detail level parameter dp1 and the second detail level parameter dp2 have two stages or four or more stages may be described.

[0069]

It is noted that the second detail level parameter dp2 is desirably set to a detail level equal to or finer than the first detail level parameter dp1.

case, pieces of information on the group (a group mark, a group name, and the like) may be omitted.

[0090]

When an amount of information displayed in the user position information display area 103 is large, the user position information is displayed in a state of being scrollable in the vertical direction. Fig. 7 illustrates a state in which the upper area in the user position information display area 103 is displayed, and Fig. 8 illustrates a state in which the lower area in the user position information display area 103 is displayed.

[0091]

The detail level of the position information displayed in the user position information display area 103 is determined based on the safety information (the safety type parameter sp) in the position information database D1, the biometric information (the biometric information parameter rp) in the biometric information database D2, and the detail level (the first detail level parameter dp1 and the second detail level parameter dp2) of the position information to be disclosed in the group information database D3.

For a user whose safety type parameter sp is 0 and whose biometric information parameter rp is 0, that is, a user who has performed the safety answer operation and

whose biometric information has no abnormality, the position information of said user is displayed with the detail level of the position information disclosed in normal times based on the first detail level parameter dp1.

Figs. 7 and 8 illustrate examples in which the safety type parameter sp of the user name: Hanako belonging to the group name: Tanaka family is 0, the biometric information parameter rp thereof is 0, and the position information thereof is displayed with the detail level (the first detail level parameter dp1: 1 (the coarse position information level)) of the position information disclosed in normal times.

[0092]

Even if the user ID is the same, the detail level of the position information disclosed in each group can be made different.

Figs. 7 and 8 illustrate examples in which the user having the user ID: 11 displays medium position information (Minato-ku, Tokyo) in normal times with the user name: papa in the group name: Tanaka family based on the first detail level parameter dp1, and displays coarse position information (Tokyo) in normal times with the user name: Taro in the group name: parents' home based on the first detail level parameter dp1.

[0093]

display area 202 for displaying the biometric information (refer to Fig. 9). It is noted that the screen switching button display area 105 may also be provided on the second screen P2.

The biometric information display area 202 includes a body temperature display area 202a, a pulse display area 202b, a blood pressure display area 202c, and an activity state display area 202d.

[0106]

The pieces of information on the body temperature, the pulse, and the blood pressure in the biometric information display area 202 display the biometric information (the normal range and measured value) of the user in time series for each measurement type.

In Fig. 9, the normal range is indicated by a broken line, and the measured value is indicated by a solid line.

The measured value is desirably displayed in different output methods in a case where the measured value is within the normal range and in a case where the measured value is out of the normal range.

For example, a solid line of the measured value within the normal range may be displayed in black, and a solid line of the measured value out of the normal range may be displayed in red.

Fig. 9 shows an example in which a solid line of the

measured value within the normal range is indicated by a thin line, and a solid line of the measured value out of the normal range is indicated by a thick line.

[0107]

The body temperature display area 202a displays information on the body temperature of the user in time series.

The pulse display area 202b displays information on the pulse of the user in time series.

The blood pressure display area 202c displays information on the blood pressure of the user in time series.

[0108]

The information on the activity state in the biometric information display area 202 displays, in time series, an active time zone, a non-active time zone, and a moving time zone in the biometric information display area 202.

In Fig. 9, the active time zone is indicated by a white zone, the non-active time zone is indicated by a black zone, and the moving time zone is indicated by a zone including hatched lines.

[0109]

By displaying the second screen P2 on the display unit 12 of the communication terminal, it is possible to confirm the biometric information on the user of the communication

to the biometric information and a contact name display area 302 that displays the name of the contact (refer to Fig. 10). It is noted that the screen switching button display area 105 may also be provided on the third screen P3.

[0112]

The contact name display area 302 includes the first calling instruction area 302a, a second calling instruction area 302b, a third calling instruction area 302c, a fourth calling instruction area 302d, a fifth calling instruction area 302e, a sixth calling instruction area 302f, and a seventh calling instruction area 302g.

[0113]

In the first calling instruction area 302a, a notation indicating that a call is to be made to the user corresponding to the biometric information is written, and when the first calling instruction area 302a is clicked, a call is made to a phone number of the user corresponding to the biometric information recorded in the contact information database D5.

In the first embodiment, when the first calling instruction area 302a is clicked, the 51st communication terminal M51 of the user (the user name: papa, Taro) with the user ID: 11 makes a call to a phone number (090-△△△△-o●o●) of the 54th communication terminal M54 of the

[0144]

That is, the communication terminal that receives said predetermined message (the communication terminal such as the neighbor (Mx. Suzuki) of the user of the 54th communication terminal M54) receives a notification of at least one of the information on the presence or absence of the response from the 54th communication terminal M54 to the information server 30 or the information on the normal range of the biometric information on the user of the 54th communication terminal M54.

[0145]

After receiving said call, the user of the 51st communication terminal M51 may talk, or the control unit 15 of the 51st communication terminal M51 may read out said predetermined message and talk.

[0146]

The second embodiment has described an example in which the user of the first communication terminal (for example, the 51st communication terminal M51) inputs a first message, and the first message is transmitted from the first communication terminal to the second communication terminal (for example, the 54th communication terminal M54) via the information server 30. In addition, a description has been given as to an example in which the first communication terminal generates a second message and a third message,

CLAIMS

1. An information transmission system comprising:

a first communication terminal;

a second communication terminal; and

an information server configured to communicate with the first communication terminal and the second communication terminal, wherein:

the second communication terminal includes a biometric information acquisition unit configured to acquire biometric information on a user of the second communication terminal,

the information server records a biometric information database including the biometric information on the user of the second communication terminal, wherein the biometric information is transmitted from the second communication terminal, and information on a normal range of the biometric information,

a first message including predetermined information is transmitted from the information server to the second communication terminal,

a second message including the predetermined information is transmitted from the information server to the second communication terminal when there is no response from the second communication terminal to the information

server until a first standby time elapses after transmission of the first message,

the second communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the second communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the second communication terminal includes a message related to the response from the second communication terminal to the information server,

the first communication terminal receives, from the information server, a notification of information on presence or absence of the response from the second communication terminal to the information server and/or at least one of the biometric information on the user of the second communication terminal or information on whether the biometric information includes information out of the normal range,

the biometric information on the user of the second communication terminal is acquired by the biometric information acquisition unit and is transmitted from the

second communication terminal to the information server,

the information on whether the biometric information includes the information out of the normal range is generated by the information server based on the biometric information database, and

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message or the second message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.

2. The information transmission system according to claim 1, wherein:

the first message and the second message are generated by any one of the first communication terminal and the information server at predetermined time intervals,

the first message includes information indicating that

automatic transmission is performed by any one of the first communication terminal and the information server and includes the predetermined information, and

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information.

3. The information transmission system according to claim 1, wherein:

the information server determines whether a message input to the first communication terminal and transmitted from the first communication terminal to the second communication terminal via the information server corresponds to the first message by determining whether the message include a predetermined character string as the predetermined information,

the second message is generated by any one of the first communication terminal and the information server,

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the first communication terminal displays a screen including the first message,

when the second message is transmitted to the second

communication terminal, the screen including the first message in the first communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to the information server,

the biometric information acquisition unit includes a detection unit configured to detect position information and acceleration of the second communication terminal,

the position information and the acceleration obtained by the detection unit are transmitted as the biometric information from the second communication terminal to the information server, and

the notification from the information server to the first communication terminal is not performed even if there is no response from the second communication terminal to the information server until the first standby time elapses after the transmission of the first message, when a time zone in which a moving speed of the second communication terminal, the moving speed being calculated based on the position information and the acceleration obtained by the detection unit, is equal to or higher than a speed

threshold value is included before the first standby time elapses.

4. The information transmission system according to claim 2 or 3, wherein:

a third message including the predetermined information is transmitted from the information server to the second communication terminal when there is no response from the second communication terminal to the information server until a second standby time elapses after transmission of the second message,

the third message is generated by any one of the first communication terminal and the information server,

the third message includes information indicating that automatic re-retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the second communication terminal outputs a reception notification sound for a longer time and/or with a larger volume when receiving the second message than when receiving the first message,

the second communication terminal outputs a reception notification sound for a longer time and/or with a larger volume when receiving the third message than when receiving the second message,

when the third message is transmitted to the second

communication terminal, a screen including the first message and the second message in the second communication terminal includes the third message,

when there is no response from the second communication terminal to the information server and the biometric information includes the information out of the normal range until the second standby time elapses after the transmission of the second message, the first communication terminal receives, from the information server, a notification of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range,

when there is no response from the second communication terminal to the information server until a third standby time elapses after transmission of the third message, the first communication terminal receives, from the information server, a notification of information on presence or absence of the response from the second communication terminal to the information server for at least one of the first message, the second message, or the third message, and

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of

at least one of the first message, the second message, or the third message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.

5. The information transmission system according to claim 1, wherein:

the information server records a position information database including position information on the second communication terminal, and

the first communication terminal displays, based on the position information database and the biometric information database, the position information on the second communication terminal and at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range.

6. The information transmission system according to claim 5, wherein:

the first communication terminal displays the screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the first communication terminal includes the second message,

when there is the response form the second communication terminal to the information server, the screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to be information server,

the biometric information acquisition unit includes a detection unit configured to detect position information on the second communication terminal,

the position information obtained by the detection unit is transmitted as the biometric information from the second communication terminal to the information server, and

the first communication terminal displays, based on the position information database and the biometric information database, a first screen including the position information on the second communication terminal and the information on whether the biometric information on the user of the second

communication terminal includes the information out of the normal range in a switchable state from the screen including the first message.

7. The information transmission system according to claim 6, wherein the first communication terminal displays, based on the biometric information database, a second screen showing, in time series, the biometric information on the user of the second communication terminal in a switchable state from the first screen or the screen including the first message.

8. The information transmission system according to claim 7, wherein:

the first screen includes, as the information on whether the biometric information on the user of the second communication terminal includes the information out of the normal range, a biometric abnormality mark turned on when the biometric information on the user of the second communication terminal includes the information out of the range, and

when the biometric abnormality mark included in the first screen is operated in a state in which the first screen is displayed on the first communication terminal, the first communication terminal switches to display of the second screen.

9. The information transmission system according to claim

8, wherein:

the first communication terminal displays a third screen including a calling instruction area for a phone number of the user of the second communication terminal, a calling instruction area for a phone number of person related to the user of the second communication terminal, and a calling instruction area for a phone number of a predetermined institution,

the third screen includes, as the calling instruction area for the phone number of the predetermined institution, a calling instruction area for a phone number of at least one of a fire department or a police station specified based on the position information on the second communication terminal, and

when a specific operation is performed in a state in which the second screen is displayed on the first communication terminal, the first communication terminal switches to display of the third screen.

10. The information transmission system according to claim 7, wherein:

the second screen includes an activity state display area indicating, in time series, information on whether the user of the second communication terminal is active and information on whether the user of the second communication terminal is moving,

when the second communication terminal is being operated or when acceleration of the second communication terminal is equal to or greater than an acceleration threshold value, it is determined that the user of the second communication terminal is active, and

when a moving speed of the second communication terminal is equal to or higher than a speed threshold value, it is determined that the user of the second communication terminal is moving.

11. The information transmission system according to claim 7, wherein the second screen includes an activity state display area including, in time series, information on whether the user of the second communication terminal is active and information on whether the user of the second communication terminal is moving, and at least one of a body temperature display area illustrating a time-series change in a body temperature of the user of the second communication terminal and information on a normal range of the body temperature, a pulse information display area illustrating a time-series change in a pulse of the user of the second communication terminal and information on a normal range of the pulse, or a blood pressure information display area illustrating a time-series change in a blood pressure of the user of the second communication terminal and information on a normal range of the blood pressure.

12. The information transmission system according to claim 5, wherein the information server varies, based on external information, the normal range of the biometric information.

13. The information transmission system according to claim 6, wherein:

at least one of the first communication terminal or the information server determines, a based on the information on whether the biometric information on the user of the second communication terminal includes the information out of the normal range, a detail level of the position information on the second communication terminal displayed on the first screen,

when the biometric information on the user of the second communication terminal includes the information out of the normal range, the position information on the second communication terminal is displayed on the first screen at a fine position information level, and

when the biometric information on the user of the second communication terminal does not include the information out of the normal range, the position information on the second communication terminal is displayed on the first screen at the fine position information level or at a position information level coarser than the fine position information level.

14. A method of transmitting and receiving information

between a first communication terminal and a second communication terminal via an information server configured to communicate with the first communication terminal and the second communication terminal, wherein:

the second communication terminal includes a biometric information acquisition unit configured to acquire biometric information on a user of the second communication terminal, and

the information server records a biometric information database including the biometric information on the user of the second communication terminal, wherein the biometric information is transmitted from the second communication terminal, and information on a normal range of the biometric information,

the method comprising:

a first message transmission step of transmitting, by the information server, a first message including predetermined information to the second communication terminal;

a second message transmission step of transmitting, by the information server, a second message including the predetermined information to the second communication terminal when there is no response from the second communication terminal to the information server until a first standby time elapses after transmission of the first

message; and

a notification step of notifying, by the information server, the first communication terminal of information on presence or absence of the response from the second communication terminal to the information server and/or at least one of the biometric information on the user of the second communication terminal or information on whether the biometric information includes information out of the normal range, wherein:

the second communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the second communication terminal includes the second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the second communication terminal includes a message related to the response from the second communication terminal to the information server,

the biometric information on the user of the second communication terminal is acquired by the biometric information acquisition unit and is transmitted from the second communication terminal to the information server,

the information on whether the biometric information includes the information out of the normal range is generated by the information server based on the biometric information database, and

the notification of the information on the presence or absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message or the second message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.

15. The method according to claim 14, further comprising:

a third message transmission step of transmitting, by the information server, a third message including the predetermined information to the second communication terminal when there is no response from the second communication terminal to the information server until a second standby time elapses after transmission of the

second message;

a first notification step of notifying, as one of the notification steps performed by the information server, the first communication terminal of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range when there is no response from the second communication terminal to the information server and the biometric information includes the information out of the normal range until the first standby time elapses after the transmission of the first message;

a second notification step of notifying, as one of the notification steps performed by the information server, the first communication terminal of at least one of the biometric information on the user of the second communication terminal or the information on whether the biometric information includes the information out of the normal range when there is no response from the second communication terminal to the information server and the biometric information includes the biometric information out of the normal range until the second standby time elapses after the transmission of the second message; and

a third notification step of notifying, as one of the notification steps performed by the information server, the

first communication terminal of information on presence or absence of the response from the second communication terminal to the information server for at least one of the first message, the second message, or the third message when there is no response from the second communication terminal to the information server until a third standby time elapses after transmission of the third message, wherein:

the second message includes information indicating that automatic retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

the third message includes information indicating that automatic re-retransmission is performed by any one of the first communication terminal and the information server and includes the predetermined information,

when the third message is transmitted to the second communication terminal, a screen including the first message and the second message in the second communication terminal includes the third message,

the first communication terminal displays a screen including the first message,

when the second message is transmitted to the second communication terminal, the screen including the first message in the first communication terminal includes the

second message,

when there is the response from the second communication terminal to the information server, the screen including at least the first message in the first communication terminal includes the message related to the response from the second communication terminal to the information server,

the biometric information acquisition unit includes a detection unit configured to detect position information and acceleration of the second communication terminal,

the position information and the acceleration obtained by the detection unit are transmitted as the biometric information from the second communication terminal to the information server,

when a time zone in which a moving speed of the second communication terminal, the moving speed being calculated based on the position information and the acceleration obtained by the detection unit, is equal to or higher than a speed threshold value is included until the first standby time elapses, the notification step is not performed by the information server even if there is no response from the second communication terminal to the information server until the first standby time elapses after the transmission of the first message, and

the notification of the information on the presence or

absence of the response from the second communication terminal to the information server is any one of a reply of at least one of the first message, the second message, or the third message transmitted from the second communication terminal to the first communication terminal via the information server, transmission of information to the first communication terminal via the information server, the information indicating that the second communication terminal is able to display the first message transmitted from the first communication terminal, and transmission of information to the first communication terminal via the information server, the information indicating that a predetermined operation has been performed in the second communication terminal.